IN THE SPECIFICATION

Please replace the paragraphs starting on in the specification on page 11, line 15, and ending on page 13, line 7, with the following substitute paragraphs:

--(4) Determination and analysis of nucleotide sequence of purified DNA fragment

The nucleotide sequence of the purified DNA fragment was determined and analyzed using a 373A DNA sequence system (Perkin-Elmer). Thus, an amino acid sequence which had been deduced from the determined nucleotide sequence was confirmed to comprise the previously described amino acid sequence (His Glu Thr Gln Thr Leu Tyr Phe Val Asp Thr) (SEQ ID NO: 2 residues 24-34). Thus, a partial sequence of the gene which encodes a protein capable of regenerating luciferin was confirmed to be present in the DNA fragment amplified by the above RT-PCR.

(5) Analysis of downstream region by 3'RACE

First, a primer was designed according to the above analysis for DNA sequence, and then synthesized by Amersham Pharmacia Biotech (SEQ ID NO: 5). RT-PCR was performed using the primer, the above mRNA and 3'-Full RACE CoreSet (Takara Shuzo), thereby amplifying 3' unknown region. The reaction solution was subjected to agarose electrophoresis, a DNA fragment of approximately 650 bp was purified and extracted with RecoChip (Takara Shuzo), and the nucleotide sequence was determined and analyzed using a DNA sequencer. Therefore, the 5' region of the determined nucleotide sequence was confirmed to contain a sequence being the same as that of the 3' sequence of the partial sequence of the above gene encoding a protein capable of regenerating luciferin. Further, an amino acid sequence which had been deduced from the determined nucleotide sequence was confirmed to comprise the previously described amino acid sequence (Ile Pro Asp Pro Gln Val Thr Ser Val Ala Phe Gly Gly Pro Asn Leu Asp Glu)(SEQ ID NO: 2 residues 249-266).

(6) Analysis of upstream region by 5' RACE

First, primers were designed according to the above analysis for DNA sequence, and then synthesized by Amersham Pharmacia Biotech (SEQ ID NOS: 6 to 9). RT-PCR was performed using the primers, the above mRNA and 5'-Full RACE CoreSet (Takara Shuzo), thereby amplifying 5' unknown region. The reaction solution was subjected to agarose electrophoresis, a DNA fragment of approximately 400 bp was purified and extracted with RecoChip (Takara Shuzo), and the nucleotide sequence was determined and analyzed using a DNA sequencer. Therefore, the determined nucleotide sequence was confirmed to contain a sequence being the same as that of the partial sequence of the above gene encoding a protein capable of regenerating luciferin. Further, an amino acid sequence which had been deduced from the determined nucleotide sequence was confirmed to comprise the previously described amino acid sequence (Gly Pro Val Val Glu Lys Ile Ala Glu Leu Gly Lys)(SEQ ID NO: 2 residues 2-13). --